Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Slawson Exploration Company, Inc.
Well Name/Number: Rampage #1-28-33H
Location: NW NE Section 28 T30N R59E
County: Roosevelt **, MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 25-35 days drilling time.
Unusually deep drilling (high horsepower rig): Triple derrick rig to drill a single lateral horizontal Bakken Formation test, 19,882'MD/10,442'TVD.
Possible H2S gas production: Possible H2S.
In/near Class I air quality area: No Class I air quality area.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____

Comments: Triple derrick drilling rig to drill a single lateral horizontal Bakken Formation test, 19,882'MD/10,442'TVD.

_____

Water Quality

(possible concerns)
Salt/oil based mud: Yes to intermediate string hole to be drilled with oil based invert drilling fluids. Horizontal lateral will be drilled with brine fluids. Surface casing hole will use freshwater and freshwater mud system.
High water table: No high water table anticipated.
Surface drainage leads to live water: Yes, an unnamed ephemeral drainages to the northeast, about 1/4 of a mile and northwest, about ½ of a mile from this location.
Water well contamination: None, closest water wells are about 5/8 of a mile to the southwest and about ¾ of a mile to the north northwest from this location. Depth of these water wells range from 85' to 121' and both are stock water wells. This permitted well will drill surface hole with freshwater to 2229'. Will run 2229' of steel surface casing and cement it to surface.
Porous/permeable soils: No, sandy clay soils.
Class I stream drainage: No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____

Comments: 2229' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: None anticipated.
High erosion potential: No, location needs a small cut, up to 9.2' and a small fill, up to 4.9', required.
Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, large well site 450'X415'
Damage to improvements: Slight, surface use is grassland.
Conflict with existing land use/values: Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
X Other: Requires DEQ General Permit for Storm Water Discharge Associated with Construction Activity, under ARM 17.30.1102(28).

Comments: Access will be over existing county road and private farm roads. Will construct about 3/8 of a mile of new access road into this location off the existing farm road. Oil based invert drilling fluids will be recycled. Completion fluids will be trucked to a Class II disposal. Cuttings and mud solids will be disposed of in the lined reserve pit. Reserve pit will be allowed to dry and then backfilled with subsoil clays. If a closed loop mud system used will construct a smaller lined pit solely for cuttings only and freshwater drilling fluids from the surface hole. No concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residences are 7/8 of a mile to the south and 1.6 miles to the west from this location.
Possibility of H2S: Possible H2S.
Size of rig/length of drilling time: Triple drilling rig 25 to 35 days drilling time.

Mitigation:

X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified._____
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No
Threatened or endangered Species: Species identified as threatened or endangered are the Pallid Sturgeon, Interior Lease Tern, Whooping Crane and Piping Plover. Candidate species is the Sprague's Pipit. NH tracker website indicates species of concern are the Baird's Sparrow, Nelson's Sparrow and Chestnut-collared Longspur these birds are migratory.

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite

__ Other: _____

Comments: Private surface lands. Well is scheduled to be drilled January 2011, all migratory birds will have migrated out of the area. Wellsite is not close to live water. No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: Private surface lands. No concerns._____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: No concerns._____

Remarks or Special Concerns for this site

Single lateral horizontal Bakken Formation test, 19,882'MD/10,442'TVD.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur. Appears this well is a development well among existing producing wells.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ Steven Sasaki

(title:) Chief Field Inspector

Date: November 23, 2010

Other Persons Contacted:

Bureau of Mines and Geology, GWIC website

(Name and Agency)

Water wells in Roosevelt County, Montana

(subject discussed)
_November 23, 2010_____
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Roosevelt County
(subject discussed)

November 23, 2010_____
(date)

Montana Natural Heritage Program Website
(Name and Agency)
Heritage State Rank= S1, S2, S3
(subject discussed)

_November 23, 2010 _____
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____